

SPACE COOPERATION

Nuclear Spectroscopic Telescope Array Mission

Agreement Between the UNITED STATES OF AMERICA and ITALY

Effected by Exchange of Notes at
Washington January 21 and June 24, 2011

with

Memorandum of Understanding



NOTE BY THE DEPARTMENT OF STATE

Pursuant to Public Law 89—497, approved July 8, 1966
(80 Stat. 271; 1 U.S.C. 113)—

“ . . . the Treaties and Other International Acts Series issued under the authority of the Secretary of State shall be competent evidence . . . of the treaties, international agreements other than treaties, and proclamations by the President of such treaties and international agreements other than treaties, as the case may be, therein contained, in all the courts of law and equity and of maritime jurisdiction, and in all the tribunals and public offices of the United States, and of the several States, without any further proof or authentication thereof.”

ITALY

**Space Cooperation: Nuclear Spectroscopic
Telescope Array Mission**

*Agreement effected by exchange of notes at
Washington January 21 and June 24, 2011;
Entered into force June 24, 2011.
With memorandum of understanding.*

**DEPARTMENT OF STATE
WASHINGTON**

January 21, 2011

Excellency:

I have the honor to refer to the recent discussions between representatives of the Government of the United States of America and the Government of the Italian Republic concerning the terms and conditions whereby the National Aeronautics and Space Administration (NASA) and the Italian Space Agency (ASI) will undertake cooperation on the NASA-led Nuclear Spectroscopic Telescope Array (NuSTAR) mission.

On behalf of the Government of the United States of America, I propose that cooperation between the two Governments on this project shall be in accordance with the terms and conditions set forth in the enclosed Memorandum of Understanding, signed December 1 and December 22, 2010, between NASA and ASI.

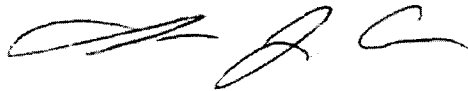
His Excellency
Giulio Terzi di Sant'Agata,
Ambassador of Italy.

DIPLOMATIC NOTE

If the foregoing proposal is acceptable to the Government of the Italian Republic, I further propose that this note, including the enclosed Memorandum of Understanding, and Your Excellency's affirmative reply shall constitute an agreement between the two Governments which shall enter into force on the date of Your Excellency's reply, and shall remain in force until the expiration or termination of the Memorandum of Understanding, in accordance with the terms thereof.

Accept, Excellency, the renewed assurances of my highest consideration.

For the Secretary of State:

A handwritten signature in dark ink, consisting of a series of fluid, connected strokes that form a stylized, cursive representation of the name.

Enclosure:

Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING

BETWEEN THE

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
OF THE UNITED STATES OF AMERICA**

AND THE

ITALIAN SPACE AGENCY

CONCERNING THE

NUCLEAR SPECTROSCOPIC TELESCOPE ARRAY MISSION

PREAMBLE

The National Aeronautics and Space Administration of the United States of America (hereinafter referred to as "NASA"), and

The Italian Space Agency (hereinafter referred to as "ASI"),

Collectively hereinafter referred to as "the Parties":

CONSIDERING that NASA has approved the Nuclear Spectroscopic Telescope Array (NuSTAR) mission for a mission restart with a launch readiness date of 2012;

CONSIDERING the scientific interest to locate massive black holes in other galaxies and locate and examine the remnants of collapsed stars in the Milky Way;

RECOGNIZING the benefits of cooperation to both Parties in the study of these phenomena;

CONSIDERING that NASA and ASI have a long history of cooperation in the exploration of the universe;

RECALLING the mutually beneficial cooperation between NASA and ASI in NASA's Swift Gamma Ray Burst Explorer and Gamma-ray Large Area Space Telescope (GLAST)/Fermi Missions;

HAVE AGREED as follows:

ARTICLE 1 - SCOPE

- 1.1 This Memorandum of Understanding (MOU) defines the responsibilities, as well as the terms and conditions, by which the cooperation between the Parties shall be conducted within the framework of NASA's NuSTAR mission.**
- 1.2 The primary activities addressed in this MOU concern cooperation between the Parties on the access of the Mission to ASI's Malindi Ground Station, which is located at Malindi, Kenya, and the participation of Italian scientists in the NuSTAR science team.**

ARTICLE 2 – THE NuSTAR MISSION

- 2.1 In September 2007, NASA notified the California Institute of Technology (Caltech) that the Nuclear Spectroscopic Telescope Array (NuSTAR) had been approved for a mission restart with a launch readiness date of August 2011. Subsequently in August 2009, the NuSTAR external launch readiness date was updated to 2012.**

- 2.2 Dr. Fiona Harrison of Caltech is the Principal Investigator for the NuSTAR mission. NuSTAR's primary science goal is to make the first deep observations of regions of the sky in the high-energy x-ray band (6-79 keV) in order to locate massive black holes in other galaxies, locate and examine the remnants of collapsed stars in the Milky Way galaxy, observe selected Very High Energy gamma-ray sources, and observe supernovae of opportunity in the local group of galaxies.
- 2.3 In March 2009, Dr. Jon Morse, Director of the NASA Astrophysics Division, which provides managerial and scientific oversight of the NuSTAR Program, proposed to Dr. Enrico Flamini of ASI that NASA and ASI collaborate on selected NuSTAR technical and scientific activities. ASI accepted NASA's offer and Dr. Fabrizio Fiore of the National Institute for Astrophysics-Astronomical Observatory of Rome (INAF-OAR) will serve as the scientist responsible for Italy's contributions to the NuSTAR Program.

ARTICLE 3 – PROGRAMMATIC RESPONSIBILITIES OF NASA

NASA shall use reasonable efforts to carry out the following responsibilities:

- 3.1 Provide management, systems engineering, and technical documentation relating to the NuSTAR ground network.
- 3.2 Define the communications interfaces between the NuSTAR spacecraft and the Malindi Ground Station and between the Malindi Ground Station and the NuSTAR Mission Operations Center, to be located at the University of California in Berkeley, California.
- 3.3 Provide NuSTAR spacecraft and instrument test data and software for the display of NuSTAR telemetry, and equipment and software to support pre-launch interface testing with the Malindi Ground Station.
- 3.4 Provide membership on the science team to selected Italian scientists and full access to the NuSTAR scientific and calibration data and associated analysis tools consistent with the NuSTAR Collaboration and Data Policy.

ARTICLE 4 – PROGRAMMATIC RESPONSIBILITIES OF ASI

ASI shall use reasonable efforts to carry out the following responsibilities:

- 4.1 Provide access of the NuSTAR spacecraft to the Malindi Ground Station, located in Malindi, Kenya, as the primary NuSTAR data downlink and command uplink facility.
- 4.2 Provide technical support for development activities associated with NuSTAR's use of the Malindi Ground Station, including the necessary interface information for tracking and telemetry.
- 4.3 Provide equipment and software to perform Radio Frequency (RF) and data compatibility testing between NuSTAR and the Malindi Ground Station.

- 4.4 Provide support for analysis and dissemination of NuSTAR's scientific results.
- 4.5 Provide support for scientific software development and data archiving through the ASI Science data Center.

ARTICLE 5 - FINANCIAL ARRANGEMENTS

- 5.1 NASA and ASI shall each bear the costs of discharging their respective responsibilities, including travel and subsistence of personnel and transportation of all equipment and other items for which it is responsible. Further, the obligations of NASA and ASI under this MOU are subject to the availability of appropriated funds. Should either Party encounter budgetary problems which may affect the activities to be carried out under this MOU, the Party encountering the problems shall notify and consult with the other Party as soon as possible in order to minimize the negative impact of such problems in the cooperation.

ARTICLE 6 - MANAGEMENT/POINTS OF CONTACT

- 6.1 NASA's Astrophysics Division Director, within the NASA Science Mission Directorate, is responsible for all NASA Astrophysics activities, including the NuSTAR mission. The Division Director serves as the formal programmatic liaison in matters relevant to NASA's Astrophysics activities with foreign agencies, including ASI, and provides liaison and coordination with other U.S. Government agencies.
- 6.2 NASA's Astrophysics Division Director is supported in the managerial and scientific oversight of the NuSTAR mission by the NuSTAR Program Executive and Program Scientist, respectively. The NuSTAR Program Executive serves as the principal point of contact for NASA in the performance of this MOU through NuSTAR launch and Initial Operational Capability (IOC). The Operating Missions Program Executive is the point of contact after IOC.
- 6.3 The NuSTAR Principal Investigator is the primary point of contact with foreign scientists relevant to NuSTAR mission science goals, objectives, and policies.
- 6.4 NASA has designated the Jet Propulsion Laboratory (JPL) to lead the formulation and implementation of the NuSTAR mission. A NuSTAR Project Office has been established for this purpose, and a Mission Project Manager has been assigned. As an Explorer-class mission, the NASA GSFC Explorers Office has oversight of the JPL NuSTAR Project development activity.
- 6.5 For ASI, the Head of the Exploration and Observation of the Universe Unit is responsible for overall programmatic management of the Italian-sponsored NuSTAR contributions. This individual is also the principal point of contact for ASI in the performance of this MOU.

- 6.6 Each Party will provide, on occasion, as mutually agreed-upon, for its representatives to visit one another's facilities to participate in integration and testing and to observe, confer with, and advise the other Party in regard to aspects of design and development of compatible hardware interfaces, integration, and testing, as well as any activities required to ensure safe, reliable operations of the hardware as part of the overall NuSTAR system.

ARTICLE 7 – LIABILITY AND RISK OF LOSS

- 7.1 The objective of this Article is to establish a cross-waiver of liability in the interest of encouraging participation in the exploration, exploitation, and use of outer space. The Parties intend that the cross-waiver of liability be broadly construed to achieve this objective.
- 7.2 For purposes of this Article:
- (a) The term "Damage" means:
 - (i) Bodily injury to, or other impairment of health of, or death of, any person;
 - (ii) Damage to, loss of, or loss of use of any property;
 - (iii) Loss of revenue or profits; or
 - (iv) Other direct, indirect, or consequential Damage.
 - (b) The term "Launch Vehicle" means an object, or any part thereof, intended for launch, launched from Earth, or returning to Earth which carries Payloads, persons, or both.
 - (c) The term "Payload" means all property to be flown or used on or in a Launch Vehicle.
 - (d) The term "Protected Space Operations" means all Launch Vehicle and Payload activities on Earth, in outer space, or in transit between Earth and outer space in implementation of an agreement for launch services. Protected Space Operations begins at the signature of this MOU and ends when all activities done in implementation of this MOU are completed. It includes, but is not limited to:
 - (i) Research, design, development, test, manufacture, assembly, integration, operation, or use of Launch Vehicles, Payloads, or instruments, as well as related support equipment and facilities and services; and
 - (ii) All activities related to ground support, test, training, simulation, or guidance and control equipment and related facilities or services.

"Protected Space Operations" excludes activities on Earth that are conducted on return from space to develop further a Payload's product or process for use other than for the activities within the scope of an agreement for launch services.

(e) The term "Related Entity" means:

- (i) A contractor or subcontractor of a Party at any tier;**
- (ii) A user or customer of a Party at any tier; or**
- (iii) A contractor or subcontractor of a user or customer of a Party at any tier.**

The terms "contractor" and "subcontractor" include suppliers of any kind. The term "Related Entity" may also apply to a State, or an agency or institution of a State, having the same relationship to a Party as described in paragraphs 2(e)(i) through 2(e)(iii) of this Article, or otherwise engaged in the implementation of Protected Space Operations as defined in paragraph 2(d) of this Article.

7.3 Cross-waiver of liability:

- (a) Each Party agrees to a cross-waiver of liability pursuant to which each Party waives all claims against any of the entities or persons listed in paragraphs 3(a)(i) through 3(a)(iv) of this Article based on Damage arising out of Protected Space Operations. This cross-waiver shall apply only if the person, entity, or property causing the Damage is involved in Protected Space Operations and the person, entity, or property damaged is damaged by virtue of its involvement in Protected Space Operations. The cross-waiver shall apply to any claims for Damage, whatever the legal basis for such claims, against:**
 - (i) The other Party;**
 - (ii) A Related Entity of any entity identified in paragraphs 3(a)(i) or 3(a)(ii) of this Article; or**
 - (iii) The employees of any of the entities identified in paragraphs 3(a)(i) through 3(a)(iii) of this Article.**
- (b) In addition, each Party shall extend the cross-waiver of liability, as set forth in paragraph 3(a) of this Article, to its own Related Entities by requiring them, by contract or otherwise, to:**
 - (i) Waive all claims against the entities or persons identified in paragraphs 3(a)(i) through 3(a)(iii) of this Article; and**
 - (ii) Require that their Related Entities waive all claims against the entities or persons identified in paragraphs 3(a)(i) through 3(a)(iii) of this Article.**

- (c) For avoidance of doubt, this cross-waiver of liability includes a cross-waiver of claims arising from the Convention on International Liability for Damage Caused by Space Objects (Liability Convention), done on March 29, 1972, where the person, entity, or property causing the Damage is involved in Protected Space Operations and the person, entity, or property damaged is damaged by virtue of its involvement in Protected Space Operations.
- (d) Notwithstanding the other provisions of this Article, this cross-waiver of liability shall not be applicable to:
 - (i) Claims between a Party and its own Related Entity or between its own Related Entities;
 - (ii) Claims made by a natural person, his/her estate, survivors, or subrogees (except when a subrogee is a Party to this MOU or is otherwise bound by the terms of this cross-waiver) for bodily injury to, or other impairment of health of, or death of, such person;
 - (iii) Claims for Damage caused by willful misconduct;
 - (iv) Intellectual property claims;
 - (v) Claims for Damage resulting from a failure of a Party to extend the cross-waiver of liability to its Related Entities, pursuant to paragraph 3(b) of this Article; or
 - (vi) Claims by a Party arising out of or relating to the other Party's failure to perform its obligations under this MOU.
- (e) Nothing in this Article shall be construed to create the basis for a claim or suit where none would otherwise exist.
- (f) In the event of third-Party claims for which the Parties may be liable, the Parties shall consult promptly to determine an appropriate and equitable apportionment of any potential liability and on the defense of any such claims.
- (g) Except as otherwise provided in 7.3(c), nothing in this MOU shall affect liability, if any, pursuant to the Liability Convention, done on March 29, 1972. In the event of a claim arising out of the Liability Convention, the Parties shall request that their respective Governments consult promptly on any potential liability, on any apportionment of such liability, and on the defense of such claim.

ARTICLE 8 - REGISTRATION OF SPACE OBJECTS

- 8.1 NASA shall request that its Government register NuSTAR as a space object in accordance with the Convention on the Registration of Objects Launched into Outer

Space, done on November 12, 1974 (the Registration Convention). However, exercise of jurisdiction and control of NuSTAR shall be subject to the relevant provisions of this MOU. Registration pursuant to this Article shall not affect the rights or obligations of the Parties under the Liability Convention.

ARTICLE 9 -TRANSFER OF GOODS AND TECHNICAL DATA

The Parties are obligated to transfer only those technical data (including software) and goods necessary to fulfill their respective responsibilities under this MOU, in accordance with the following provisions, notwithstanding any other provisions of this MOU:

- 9.1 All activities under this MOU shall be carried out in accordance with the Parties' national laws and regulations, including those laws and regulations pertaining to export control and the control of classified information.
- 9.2 The transfer of technical data for the purpose of discharging the Parties' responsibilities with regard to interface, integration, and safety shall normally be made without restriction, except as required by paragraph 1 of this Article.
- 9.3 All transfers of goods and proprietary or export-controlled technical data are subject to the following provisions.
 - (a) In the event a Party or its Related Entity (defined for the purpose of this Article as contractors, subcontractors, grantees, or cooperating entities, or any lower tier contractor, subcontractor, grantee, or cooperating entities of a Party) finds it necessary to transfer such goods or data, for which protection is to be maintained, such goods shall be specifically identified and such data shall be marked.
 - (b) The identification for such goods and the marking on such data shall indicate that the goods and data shall be used by the receiving Party and its Related Entities only for the purposes of fulfilling the receiving Party's or Related Entities' responsibilities under this MOU, and that such goods and data shall not be disclosed or retransferred to any other entity without the prior written permission of the furnishing Party or its Related Entity.
 - (c) The receiving Party or Related Entity shall abide by the terms of the notice and protect any such goods and data from unauthorized use and disclosure.
 - (d) The Parties to this MOU shall cause their Related Entities to be bound by the provisions of this Article through contractual mechanisms or equivalent measures.
- 9.4 All goods exchanged in the performance of this MOU shall be used by the receiving Party or Related Entity exclusively for the purposes of the MOU. Upon completion of the activities under this MOU, the receiving Party or Related Entity shall return or otherwise dispose of all goods and marked proprietary or export-controlled technical data provided under this MOU, as directed by the furnishing Party or Related Entity.

ARTICLE 10 - INTELLECTUAL PROPERTY RIGHTS

- 10.1** Nothing in this MOU shall be construed as granting, either expressly or by implication, to the other Party any rights to, or interest in, any inventions or works of a Party or its Related Entities made prior to the entry into force of, or outside the scope of, this MOU, including any patents (or similar forms of protection in any country) corresponding to such inventions or any copyrights corresponding to such works.
- 10.2** Any rights to, or interest in, any invention or work made in the performance of this MOU solely by one Party or any of its Related Entities, including any patents (or similar forms of protection in any country) corresponding to such invention or any copyright corresponding to such work, shall be owned by such Party or Related Entity. Allocation of rights to, or interest in, such invention or work between such Party and its Related Entities shall be determined by applicable laws, rules, regulations, and contractual obligations.
- 10.3** It is not anticipated that there will be any joint inventions made in the performance of this MOU. Nevertheless, in the event that an invention is jointly made by the Parties in the performance of this MOU, the Parties shall, in good faith, consult and agree within 30 calendar days as to:
- (a) the allocation of rights to, or interest in, such joint invention, including any patents (or similar forms of protection in any country) corresponding to such joint invention;
 - (b) the responsibilities, costs, and actions to be taken to establish and maintain patents (or similar forms of protection in any country) for each such joint invention; and
 - (c) the terms and conditions of any license or other rights to be exchanged between the Parties or granted by one Party to the other Party.
- 10.4** For any jointly authored work by the Parties, should the Parties decide to register the copyright in such work, they shall, in good faith, consult and agree as to the responsibilities, costs, and actions to be taken to register copyrights and maintain copyright protection (in any country).
- 10.5** Subject to the provisions of Article 9, Transfer of Goods and Technical Data, and Article 11, Release of Results and Public Information, each Party shall have an irrevocable royalty-free right to reproduce, prepare derivative works, distribute, and present publicly, and authorize others to do so on its behalf, any copyrighted work resulting from activities undertaken in the performance of this MOU for its own purposes, regardless of whether the work was created solely by, or on behalf of, the other Party or jointly with the other Party.

ARTICLE 11 - RELEASE OF RESULTS AND PUBLIC INFORMATION

- 11.1** The Parties retain the right to release public information regarding their own activities under this MOU. The Parties shall coordinate with each other in advance, concerning releasing to the public, information that relates to the other Party's responsibilities or performance under this MOU. Full acknowledgement shall be made by both Parties of the role of the other Party in the NuSTAR mission.
- 11.2** The Parties shall make the final results obtained from the NuSTAR mission available to the general scientific community through publication in appropriate journals and/or by presentation at scientific conferences as soon as feasible and in a manner consistent with established scientific practice.
- 11.3** The Parties acknowledge that the following data or information does not constitute public information and that such data or information shall not be included in any publication or presentation by a Party under this Article without the other Party's prior written permission:
 - (a)** data furnished by the other Party in accordance with Article 9, Transfer of Goods and Technical Data, of this MOU which is export-controlled, classified, or proprietary; or
 - (b)** information about an invention of the other Party before an application for a patent (or similar form of protection in any country) corresponding to such invention has been filed covering the same, or a decision not to file has been made.

ARTICLE 12 - SHARING AND DISTRIBUTION OF SCIENTIFIC DATA

- 12.1** The Parties shall have the right to use the data (processed and unprocessed) at any time for support of their respective responsibilities to the mission.
- 12.2** The Parties and their investigators at any level, including co-investigators, collaborators, and other associated scientists, shall have full and immediate access to scientific data obtained by the NuSTAR Mission, consistent with the NuSTAR Collaboration and Data Policy. The Parties shall work to ensure that all investigators have access to other telemetered science and engineering data relevant to the calibration/validation of the respective investigations.
- 12.3** Copies of all publications and reports detailing the scientific results of the NuSTAR mission investigations shall be provided, as well as the data modules on which they are based.

ARTICLE 13 - CUSTOMS CLEARANCE, IMMIGRATION, AND OWNERSHIP

- 13.1 In accordance with its laws and regulations, each Party shall facilitate free customs clearance and waiver of all applicable customs duties and taxes for goods necessary for the implementation of this MOU. In the event that any customs duties or taxes of any kind are nonetheless levied on such equipment and related goods, such customs duties or taxes shall be borne by the Party of the country levying such customs duties or taxes. The Parties' obligation to facilitate duty-free entry and exit of equipment and related goods is fully reciprocal.
- 13.2 Each of the Parties shall facilitate the movement of persons and goods necessary to comply with this MOU into and out of its territory, subject to its laws and regulations.
- 13.3 Subject to its laws and regulations, each Party shall facilitate provision of the appropriate entry and residence documentation, if required, for the other Party's nationals who enter, exit, or reside within its territory in order to carry out the activities under this MOU.
- 13.4 Equipment provided by NASA pursuant to this MOU shall remain the property of NASA. Equipment provided by ASI pursuant to this MOU shall remain the property of ASI. Each Party agrees to return any of the other Party's equipment in its possession to the other Party at the conclusion of the project.

ARTICLE 14 - CONSULTATION AND DISPUTE RESOLUTION

The Parties agree to consult promptly with each other on all issues involving interpretation, implementation, or performance of the MOU. An issue concerning the interpretation, implementation, or performance of this MOU shall first be referred to the appropriate points of contact identified above for the Parties in Article 6. If they are unable to come to agreement on any issue, then the issue shall be referred to the NASA Associate Administrator for the Science Mission Directorate and the ASI Head of Exploration and Observation of the Universe Unit, or their designees; and if unresolved at this level, to the NASA Administrator and the ASI President, or their designated representatives, for joint resolution.

ARTICLE 15- MISHAP INVESTIGATION

In the case of a mishap or mission failure, the Parties agree to provide assistance to each other in the conduct of any investigation, bearing in mind, in particular, the provisions of Article 9 (Transfer of Goods and Technical Data). In the case of activities which might result in the death of or serious injury to persons, or substantial loss of or damage to property as a result of activities under this MOU, the Parties agree to establish a process for investigating each such mishap as part of their program/project implementation agreements.

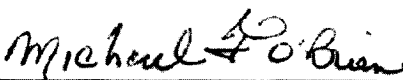

ARTICLE 16 - AMENDMENTS

This MOU may be amended at any time by mutual written agreement.

**ARTICLE 17 - ENTRY INTO FORCE, TERMINATION, AND CONTINUING
OBLIGATIONS**

- 18.1 This MOU shall enter into force upon signature by the Parties and the conclusion of an exchange of diplomatic notes between the Governments of the Parties incorporating its terms and conditions. This MOU shall remain in force until December 31, 2015, to permit the completion of the NuSTAR mission and data analysis period. This MOU may be extended by mutual written agreement of the Parties, provided that the exchange of notes remains in force.
- 18.2 Either Party may terminate this MOU at any time by giving the other Party at least six months' written notice of its intent to terminate. The obligations of the Parties set forth in the Liability and Risk of Loss; Intellectual Property Rights; and Transfer of Goods and Technical Data provisions in this MOU shall continue to apply after the expiration or termination of this MOU. In the event of termination, the Parties shall endeavor to minimize the negative impacts of any such termination on the other Party.

Done in duplicate in the English language.

 _____ FOR THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION OF THE UNITED STATES OF AMERICA	 _____ FOR THE ITALIAN SPACE AGENCY
--	--

Date: Dec 1, 2010

Date: Dec 22, 2010

Place: Washington, DC

Place: Rome, I



Embassy of Italy
Washington, D.C.

Prot. 3441

NOTE VERBALE

The Embassy of Italy presents its compliments to the U.S. Department of State and has the honor to refer to its Diplomatic Note of January 21st 2011 concerning the terms and conditions whereby the National Aeronautics and Space Administration (NASA) and the Italian Space Agency (ASI) will undertake cooperation on the NASA-led Nuclear Spectroscopic Telescope Array (NuSTAR) mission.

The Note is quoted as follows:

“ I have the honor to refer to the recent discussions between representatives of the Government of the United States of America and the Government of the Italian Republic concerning the terms and conditions whereby the National Aeronautics and Space Administration (NASA) and the Italian Space Agency (ASI) will undertake cooperation on the NASA-led Nuclear Spectroscopic Telescope Array (NuSTAR) mission.

On behalf of the Government of the United States of America, I propose that the cooperation between the two Governments on this project shall be in accordance with the terms and conditions set forth in the Memorandum of Understanding, signed December 22nd 2010 between NASA and ASI.

If the foregoing proposal is acceptable to the Government of the Italian Republic, I further propose that this note, including the enclosed Memorandum of Understanding, and Your Excellency's affirmative reply shall constitute an agreement between the two Governments which shall enter into force on the date of Your Excellency's reply, and shall remain in force until the expiration or termination of the Memorandum of Understandings, in accordance with the terms thereof".

On behalf of the Government of the Italian Republic, the Embassy of Italy agrees that cooperation between the two Governments on this project shall be in accordance with the terms and conditions set forth in the Memorandum of Understanding, signed December 1 and December 22, 2010, between NASA and ASI.

On behalf of the Government of the Italian Republic, the Embassy of Italy agrees that this Note together with the U.S. Department of State's Diplomatic Note dated January 21, 2011, including the enclosed Memorandum of Understanding, shall constitute an agreement between the two Governments which shall enter into force on the date of this Note. This agreement shall remain in force until the expiration or termination of the Memorandum of Understanding, in accordance with the terms thereof.

Accept, Excellency, the renewed assurances of my highest consideration.

June 24, 2011

U.S. Department of State
Washington DC, 20520

